AMENDMENTS TO THE CLAIMS

Please amend the claims of the present application as set forth below. More specifically, a detailed listing of all claims has been provided. This listing of claims will replace all prior versions and listings of claims in the application. Changes to the claims are shown by strikethrough or double brackets (for deleted matter) and underlining (for added matter).

By way of overview, upon entry of this Response, claims 1-3, 9-17, 23-31 and 33-49 will be pending. The status of the pending claims upon entry of this Response is indicated below:

a) Claims 2-3, 9-12, 14-17, 23-26, and 28-31 are original;

b) Claims 1, 13, 27, and 36-48 were previously presented;

c) Claims 33, 34, 35, and 49 are currently amended; and

d) Claims 4-8, 18-22, and 32 are canceled without prejudice or disclaimer

Listing of Claims

Begins on next page

1. (Previously presented) A computer system user interface for statistical analysis comprising:

a data entry display screen configured to receive user input providing tabular data;

a configuration and control display screen configured to receive user input selecting a particular statistical analysis to be performed on the tabular data;

statistical computation means responsive to user input received in the configuration and control display screen to perform the particular statistical analysis using the tabular data entered by user input in the data entry display screen to generate statistical results wherein the statistical computation means is operable to retrieve and reformat the tabular data without user interaction; and

a results page display screen responsive to the statistical computation means and to user input received in the configuration and control display screen to format and display results of the statistical analysis,

wherein the statistical analysis is configured to find at least one statistically significant factor affecting a given response within the user input data based on the particular statistical analysis selected through the configuration and control display screen.

2. (Original) The user interface of claim 1 wherein the statistical computation means includes:

means for computing the particular statistical analysis as one or more of: mean of the response, median of a function response, standard deviation of a function response, 1st and 3rd quartile of a function response, stability factor of a function response, percentiles of a function response, percentile span of a function response, mean of the response using weighted data, median of the response using weighted data, standard

deviation of the response using weighted data, 1st and 3rd quartile of the response using weighted data, stability factor of the response using weighted data, percentiles of the response using weighted data, percentile span of the response using weighted data, mean of the response for the top N elements, median of a function response for the top N elements, standard deviation of a function response for the top N elements, 1st and 3rd quartile of a function response for the top N elements, stability factor of a function response for the top N elements, percentiles of a function response for the top N elements, percentile span of a function response for the top N elements, mean of the response using weighted data for the top N elements, median of the response using weighted data for the top N elements, standard deviation of the response using weighted data for the top N elements, 1st and 3rd quartile of the response using weighted data for the top N elements, stability factor of the response using weighted data for the top N elements, percentiles of the response using weighted data for the top N elements, and percentile span of the response using weighted data for the top N elements.

3. (Original) The user interface of claim 1 further comprising:

a data store associated with the data entry display screen for persistent storage of the tabular data,

wherein the statistical analysis computation means is operable to retrieve the tabular data from the data store.

4-8. (Canceled)

9. (Original) A method comprising:

presenting a spreadsheet to a user on a display wherein the spreadsheet comprises a plurality of pre-defined pages;

receiving tabular data in a canonical form into a data page of the plurality of pre-defined pages;

receiving configuration input into a user interaction page of the plurality of pre-defined pages wherein the configuration input indicates a type of statistical analysis to be performed and indication of elements involved in the statistical analysis;

automatically reformatting the tabular data in accord with the type of statistical analysis without further user interaction;

automatically performing the indicated statistical analysis for all indicated elements without further interaction wherein the statistical analysis identifies a significant factor in the tabular data; and

generating results of the statistical analysis in a result page of the plurality of pre-defined pages wherein the results identify the significant factor.

10. (Original) The method of claim 9 wherein the step of receiving configuration information comprises:

receiving user input identifying portions of the tabular data representing elements for the statistical analysis and user input identifying portions of the tabular data representing a response for the statistical analysis.

11. (Original) The method of claim 10 wherein the step of receiving configuration input further comprises:

receiving user input as the configuration input identifying the type of statistical analysis as one or more of: mean of the response, median of the response, standard

deviation of the response, 1st and 3rd quartile of the response, stability factor of the response, percentiles of the response, and percentile span of the response.

12. (Original) The method of claim 9 wherein the step of generating results comprises:

generating results as tabular output in the results page.

13. (Previously presented) The method of claim 9 wherein the step of generating results comprises:

generating results as graphical output in the results page.

14. (Original) The method of claim 9 wherein the step of receiving configuration input comprises:

receiving user input identifying relevant elements within the tabular data and a corresponding response within the tabular data.

15. (Original) The method of claim 14 wherein the step of performing the statistical analysis comprises:

determining a difference between the mean of a studied element of said relevant elements and all other elements of said relevant elements to determine significance of the studied element.

16. (Original) The method of claim 14 wherein the step of performing the statistical analysis comprises:

determining a difference between a standard deviation of a studied element of said

relevant elements and all other elements of said relevant elements to determine

significance of the studied element.

17. (Original) The method of claim 14 wherein the step of performing the

statistical analysis comprises:

determining a difference between percentiles of a studied element of said relevant

elements and all other elements of said relevant elements to determine significance of the

studied element.

18-22. (Canceled)

23. (Original) A computer readable storage medium tangibly embodying program

instructions for a method, the method comprising:

presenting a spreadsheet to a user on a display wherein the spreadsheet comprises

a plurality of pre-defined pages;

receiving tabular data in a canonical form into a data page of the plurality of pre-

defined pages;

receiving configuration input into a user interaction page of the plurality of pre-

defined pages wherein the configuration input indicates a type of statistical analysis to be

performed and indication of elements involved in the statistical analysis;

automatically reformatting the tabular data in accord with the type of statistical

analysis without further user interaction;

automatically performing the indicated statistical analysis for all indicated elements without further interaction wherein the statistical analysis identifies a significant factor in the tabular data; and

generating results of the statistical analysis in a result page of the plurality of pre-defined pages wherein the results identify the significant factor.

24. (Original) The medium of claim 23 wherein the method step of receiving configuration information comprises:

receiving user input identifying portions of the tabular data representing elements for the statistical analysis and user input identifying portions of the tabular data representing a response for the statistical analysis.

25. (Original) The medium of claim 24 wherein the method step of receiving configuration input further comprises:

receiving user input as the configuration input identifying the type of statistical analysis as one or more of: mean of the response, median of the response, standard deviation of the response, 1st and 3rd quartile of the response, stability factor of the response, percentiles of the response, and percentile span of the response.

26. (Original) The medium of claim 23 wherein the method step of generating results comprises:

generating results as tabular output in the results page.

27. (Previously presented) The medium of claim 23 wherein the method step of generating results comprises:

generating results as graphical output in the results page.

28. (Original) The medium of claim 23 wherein the method step of receiving configuration input comprises:

receiving user input identifying relevant elements within the tabular data and a corresponding response within the tabular data.

29. (Original) The medium of claim 28 wherein the method step of performing the statistical analysis comprises:

determining a difference between the mean of a studied element of said relevant elements and all other elements of said relevant elements to determine significance of the studied element.

30. (Original) The medium of claim 28 wherein the method step of performing the statistical analysis comprises:

determining a difference between a standard deviation of a studied element of said relevant elements and all other elements of said relevant elements to determine significance of the studied element.

31. (Original) The medium of claim 28 wherein the method step of performing the statistical analysis comprises:

determining a difference between percentiles of a studied element of said relevant elements and all other elements of said relevant elements to determine significance of the studied element.

32. (Canceled)

33. (Currently amended) <u>A method comprising:</u>

<u>receiving user input identifying desired analysis;</u>

<u>retrieving user data from a data store;</u>

<u>reformatting the user data in accordance with the desired analysis;</u>

<u>computing factors for the desired analysis;</u>

<u>formatting output from results of the computation for presentation to the user; and</u>

<u>presenting the output to the user in response to input from the user requesting</u>

<u>output presentation,</u>

<u>wherein the steps of retrieving, reformatting, computing and formatting are</u>

<u>automated, responsive to the step of receiving and otherwise substantially devoid of</u>

<u>interaction with the user for receiving input,</u>

~~The method of claim 4~~ wherein the computing of factors for the desired analysis

comprises finding statistically significant factors affecting a given response within the

user data based on the identified desired analysis.

34. (Currently amended) <u>A computer readable storage medium tangibly</u>

<u>embodying program instructions for a method, the method comprising:</u>

<u>receiving user input identifying desired analysis;</u>

<u>retrieving user data from a data store;</u>

<u>reformatting the user data in accordance with the desired analysis;</u>

<u>computing factors for the desired analysis;</u>

<u>formatting output from results of the computation for presentation to the user; and</u>

presenting the output to the user in response to input from the user requesting output presentation,

wherein the method steps of retrieving, reformatting, computing and formatting are automated, responsive to the method step of receiving and otherwise substantially devoid of interaction with the user for receiving input,

~~The medium of claim 18~~ wherein the computing of factors for the desired analysis comprises finding statistically significant factors affecting a given response within the user data based on the identified desired analysis.

35. (Currently amended) A method implemented by a computer system comprising:

receiving data through a data entry display screen mechanism;

receiving configuration input through a configuration and control display screen mechanism, wherein the configuration input indicates:

a type of statistical analysis to be performed; and

an indication of factor-type X elements and at least one response-type Y element associated with the received data;

performing the indicated statistical analysis for all indicated elements, wherein the statistical analysis identifies a significant factor among the indicated factor-type X elements with respect to said at least one identified response-type Y element; and

generating results of the statistical analysis, wherein the results identify the significant factor.

36. (Previously presented) The method of claim 35 wherein the receiving an indication of factor-type X elements and said at least one response-type Y elements

comprises indicating respective types of the elements within a tabular display of the elements.

37. (Previously presented) The method of claim 35 wherein the receiving of the configuration input further comprises:

receiving an instruction that governs processing to identify significant factors from among identified response-type X elements with respect to an identified response-type Y element, the instruction comprising one of:

an instruction to identify main effects of various factors on the identified response-type Y element;

an instruction to identify a specified order of all effects; and

an instruction to identify all orders of effects.

38. (Previously presented) The method of claim 35 wherein the receiving of the configuration input further comprises:

receiving an instruction to standardize an identified factor-type Y element by removing an effect of an identified factor-type X element on the identified response-type Y element.

39. (Previously presented) The method of claim 35 wherein the receiving of the configuration input further comprises:

receiving an instruction to categorize an identified factor-type X element into a discrete range of values of the factor-type X element.

40. (Previously presented) The method of claim 35 wherein the receiving of the configuration input further comprises:

identifying an X level associated with a desired level of interaction analysis for an identified factor-type X element.

41. (Previously presented) The method of claim 35 wherein the receiving of the configuration input further comprises:

identifying a type of statistical measure response represented by an identified response-type Y element, the type of statistical measure response defining the type of statistical analysis to be performed.

42. (Previously presented) The method of claim 35 wherein the receiving of the configuration input further comprises:

identifying a filter that limits values analyzed for an identified factor-type X element.

43. (Previously presented) The method of claim 35 wherein the receiving of the configuration input further comprises:

identifying N top levels to be included in the statistical analysis for an identified factor-type X element.

44. (Previously presented) The method of claim 35 wherein the receiving of the configuration input further comprises:

identifying, for an identified response-type Y element, whether a weighted statistical measure should be used, as opposed to a standard statistical measure.

45. (Previously presented) The method of claim 35 wherein the receiving of the configuration input further comprises:

allowing a user to customize specifications that aid in determining which response-type X elements are significant as compared to other response-type X elements.

46. (Previously presented) The method of claim 35 further comprising, via the configuration and control display mechanism, providing an instruction to derive a transfer function based on the results of the statistical analysis.

47. (Previously presented) The method of claim 35 further comprising presenting the generated results in a tabular-type presentation, the tabular-type presentation showing main effects and higher-order effects.

48. (Previously presented) The method of claim 35 further comprising presenting the generated results in a graphical-type presentation, the graphical-type presentation showing main effects and higher-order effects.

49. (Currently amended) A computer readable storage medium tangibly embodying program instructions which implement a method when performed by a computer system, the method comprising:

receiving data through a data entry display screen mechanism;

receiving configuration input through a configuration and control display screen mechanism, wherein the configuration input indicates:

a type of statistical analysis to be performed; and

an indication of factor-type X elements and at least one response-type Y element associated with the received data;

performing the indicated statistical analysis for all indicated elements, wherein the statistical analysis identifies a significant factor among the indicated factor-type X elements with respect to said at least one identified response-type Y element; and

generating results of the statistical analysis, wherein the results identify the significant factor.